

Claims 16-24 renumbered as 27-35 as Per Rule 126

TJB 8/17/05

Appl. No. 09/187,358
Amdt. dated March 18, 2005
Response to Office action dated March 11, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 through 14 (canceled)

Claim 15 (currently amended): ~~The conveyor according to claim 1,~~
A conveyor for elongate components (12) designed with a head (41)
and a shank (42), with a feed arrangement (7), for feeding the
components in a prescribed direction, comprising a transfer
arrangement (8) with a transfer region (15) into which the elongate
components (12) are fed from a feed duct (11) comprising a head
guiding duct (13) having a feed path for the heads (41), and a
shank guiding duct (14) with the ducts (13) and (14) being in
communication with a conveying duct (16) into which the components
(12) can be moved from the transfer region (15), characterized by
the transfer arrangement (8) which comprises:

at least one catch element (18) being located externally of
the transfer region (15) and extending along, and adjacent, the
head guiding duct (13) generally in the prescribed direction of the
feeding of the elongate components (12);

at least one portion (21) of the at least one catch element
(18) being removably extendable into and out of the feed path of
the head guiding duct (13);

a biasing element (39) positioned to normally urge the at
least one portion (21) of the at least one catch element (18)
movably into the feed path of the head guiding duct (13) for
engagement with the elongate components (12) being fed
therethrough; and

the at least one catch element (18) and the at least one portion (21) thereof being mounted for deflected movement out of the feed path of the head guiding duct (13) against the normal urging of the biasing element (39) upon engagement with each of the elongate components (12) being fed through the feed path of the head guiding duct (13) to allow continued feeding of the elongate components (12) through the feed path; and

further characterized in that the at least one portion (21) is a first end portion (21) of the at least one catch element (18), and which further comprises:

a second end portion (48) of the at least one catch element (18), which is remote from the first end portion (21);

a stop surface (49) positioned for engagement with the second end portion (48) of the at least one catch element (18); and

the biasing element (39) normally urging the second end portion (48) into engagement with the stop surface (49) to limit the distance in which the first end portion (21) is urged into the feed path of the head guiding duct (13).

²³~~16~~. (new) The conveyor according to claim 15, characterized in that the at least one catch element (18) has a locking face (22) facing at least partially the transfer region (15) to prevent any elongate component (12), which has passed into the transfer region (15), from slipping therefrom.

²⁵~~17~~. (new) The conveyor according to claim 15, characterized in that the at least one catch element (18) is movable pivotally around an axis (38) and the biasing element (39) acts on, and allows movement of, the at least one catch element from the feed path upon engagement with the elongate components (12) passing through the feed path.

²⁹~~18~~. (new) The conveyor according to claim ²⁸~~17~~, characterized in that the biasing element (39) is a compression spring, the at least one catch element (18) is formed with the at least one portion (21), which is a first end, and a second end (48), and the axis (38) is located at an intermediate portion of the at least one catch element between the first end and the second end thereof, and the compression spring is arranged to engage the at least one catch element (18) between the axis (38) and the first end of the at least one catch element.

³⁰~~19~~. (new) The conveyor according to claim 15, characterized in that the transfer arrangement (8) comprises two relatively displaceable positioning segments (9, 10), the positioning segments (9, 10) defining a recess (24) through which a component (12) can be introduced into the conveying duct (16).

³¹~~20~~. (new) The conveyor according to claim ³⁰~~19~~, characterized in that the transfer arrangement (8) further comprises biasing elements (27, 28) for urging respectively the positioning segments (9, 10) together and allowing displacement thereof against the urging of the biasing elements (27, 28).

³²
~~21~~. (new) The conveyor according to claim ~~19~~³⁰, characterized in that each positioning segment (9,10) is pivotal round a respective pivot axis (25,26).

³³
~~22~~. (new) The conveyor according to claim ~~19~~³⁰, characterized in that the positioning segments (9,10) have a form substantially corresponding to the cross section of the feed duct (11).

³⁴
~~23~~. (new) The conveyor according to claim ~~19~~³⁰, characterized in that the positioning segments (9, 10) are structured to form a continuation of the feed duct (11) between at least the feed duct (11) and the transfer region (15).

³⁵
~~24~~. (new) The conveyor according to claims 15 or ~~19~~³⁰, characterized in that the conveying duct (16) is formed by a split sleeve (31) which comprises a first end portion (34) adjacent the transfer region (15) and a second end portion (35) remote from the transfer region (15) an at least one resilient element (36) is arranged on the second end portion (35), the cross section of the conveying duct (16) tapering conically substantially from the first end portion (34) to the second end portion (35) and being enlargeable against the action of the element (36).